

**What I Claim is:**

1. A timer for timing electrical power usage of an electrical apparatus comprising a sensor adapted to be connected to the electrical apparatus for sensing an on condition of the electrical apparatus, a first counter for counting down to zero time from a time greater than zero time set into the first counter, means connected to the first counter for setting a time into the first counter, a second counter for counting up in response to the sensed on condition of the electrical apparatus, a display for displaying the count of the first or second counter and a switch connected between the display and the first and second counters for selecting the count of one of the first and second counters to be displayed.
2. The timer of claim 1, including means for interrupting the electrical power to the electrical apparatus when the first counter has counted down to zero time.
3. The timer of claim 1, including means for resetting the count of the second counter to zero time.
4. The timer of claim 1, wherein said means for setting a time into the first counter is a keypad.
5. The timer of claim 1, including means for stopping and restarting the count of the first counter during the on condition of the electrical apparatus.
6. The timer of claim 1, wherein said electrical apparatus comprises one of an appliance that is powered by 110-120 VAC, a telephone and an Internet connection.
7. The timer of claim 1, wherein the display means is an LED or and LCD display.

8. The timer of claim 1, wherein the electrical apparatus has an electrical connector and an electrical cord and including a timer housing having at least one male electrical connector and at least one female connector for connecting the electrical connector and the electrical cord of the electrical apparatus to the timer.
9. The timer of claim 1, wherein the timer includes a timer housing having at least two male electrical connectors and at least two female connectors for connecting the electrical apparatus to the timer by a selected one of the female connectors.
10. The timer of claim 8, wherein the timer housing has a cover having a first position for accessing and connecting the electrical apparatus to the female connector and a second position for preventing access to the female connector and including means for locking the cover in the second position.
11. The timer of claim 10, including a slot in the cover through which the electrical cord of the electrical apparatus is adapted to pass.
12. The timer of claim 11, wherein said electrical apparatus comprises one of an appliance that is powered by 110-120 VAC, a telephone and an Internet connection.
13. The timer of claim 10, including means for resetting the count of the second counter to zero time, means for stopping and restarting the count of the first counter during the on condition of the electrical apparatus and wherein, in the second position of the cover, the cover prevents access to said switch, said means for setting a time into the first counter, said means for resetting the count of the second counter to zero time and said means for stopping and restarting the count of the first counter.
14. The timer of claim 1, including a programmable microprocessor connected to the first and second counters and the display means, said microprocessor being programmed

with power usage specifications of the electrical apparatus and unit cost of electricity for calculating the total cost of electricity used by the electrical apparatus connected to the timer and displaying the total cost on the display means.

15. The timer of claim 8, wherein the male electrical connector is a three-prong power plug mounted on one side of the housing and the female electrical connector is a receptacle for a three-prong plug mounted on a side of the housing opposite the one side on which the male electrical connector is mounted.

16. A programmable timer for timing electrical power usage of an electrical apparatus comprising a sensor adapted to be connected to the electrical apparatus for sensing an on condition of the electrical apparatus, a first counter for counting down to zero time from a time greater than zero time set into the first counter, a keypad connected to the first counter for setting a time into the first counter, a second counter for counting up in response to the sensed on condition of the electrical apparatus, a display for displaying the count of the first or second counter, a switch connected between the display and the first and second counters for selecting the count of one of the first and second counters to be displayed, means for interrupting the electrical power to the electrical apparatus when the first counter has counted down to zero time and means for resetting the count of the second counter to zero time.

17. The programmable timer of claim 16, including means for stopping and restarting the count of the first counter during the on condition of the electrical apparatus.

18. The programmable timer of claim 17, including a timer housing, said timer housing having a female connector for connecting the electrical apparatus to the timer, a cover hingedly connected to the housing, said cover having a first position for accessing and connecting the electrical apparatus to the female connector and a second position for

preventing access to the female connector and including means for locking the cover in the second position.

19. The programmable timer of claim 18, wherein, in the second position of the cover, the cover prevents access to said switch, said means for setting a time into the first counter, said means for resetting the count of the second counter to zero time and said means for stopping and restarting the count of the first counter.

20. The programmable timer of claim 16, including a programmable microprocessor connected to the first and second counters and the display means, said microprocessor being programmed with power usage specifications of the electrical apparatus and unit cost of electricity for calculating the total cost of electricity used by the electrical apparatus connected to the timer and displaying the total cost on the display means.